### Attorney's Docket No. 4363.P005C

**PATENT** 

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application of:	
David M. Colleran et al.	Examiner: Not Yet Assigned
Application No.: Not Yet Assigned )	Art Unit: Not Yet Assigned
Filed: March 26, 2004	
For: AUTOMATIC PHASE LOCK ) LOOP DESIGN USING ) GEOMETRIC PROGRAMMING )	
Which is a continuation of:	
Application No.: 10/119,347	Examiner: Mis, David C.
Filed: April 7, 2002 )	Art Unit: 2817

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

### INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed for applications filed after June 30, 2003). This IDS

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on March 26, 2004.

(Date of Deposit)

Esther Campbell

(Typed or printed name of person mailing correspondence)

(Signature of person mailing correspondence)

and IDS Citation Form are being submitted concurrently with the Continuation Application. It is respectfully requested that the cited documents be considered and that the enclosed copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s). Some or all of the references listed on the enclosed PTO/SB/08 were previously identified in the parent application (Application No.: 10/119,347, filed April 7, 2002 and copies of the references were furnished at that time.

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure

Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

If there are any additional charges, please charge Deposit Account No. 02-2666.

A duplicate copy of the Fee Transmittal is enclosed for this purpose.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: March 26, 2004

Chui-Kiu Teresa Wong, Reg No. 48,042

12400 Wilshire Blvd. Seventh Floor Los Angeles, CA 90025 (408) 720-8300

Complete if Known Substitute for form 1449A/PTO **Application Number** TBA **INFORMATION DISCLOSURE** March 26, 2004 Filing Date First Named Inventor David M. Colleran STATEMENT BY APPLICANT Art Unit 2817 (use as many sheets as necessary) **Examiner Name** Mis, David C. of 2 Attorney Docket Number Sheet

4363P005C

U.S. PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Document Number  Number - Kind Code <sup>2</sup> (if known)	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
DM		US-6,269,277	07-31-2001	Hershenson et al.					
DM		US-5,973,524	10-26-1999	Martin					
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'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

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<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

Substitute for form 1449APTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Co	Complete if Known				
			CUDE	Application Number	TBA				
			SUKE	Filing Date	March 26, 2004				
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Sheet	eet 2 of 2		Attorney Docket Number	4363P005C					

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.'	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
DM		CHAN, SHU-PARK; "Analysis of Linear Networks and Systems", Addison-Wesley Publishing Company, 1972, pgs. 23-25, 46 and 47.					
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Examiner Signature	/David Mis/ (09/27/2006)	Date Considered 09/27/2006

<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, thouse copy of this form with next communication.

<sup>&#</sup>x27;Applicant's unique citation designation number. 'Applicant is to place a check mark here if English tanguage Translation is attached.

Docket No.: 4363P005C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

2004

DAVID M. COLLERAN, ET AL.

Application No.: 10/810,444

Filed: March 26, 2004

For: Automatic Phase Lock Loop Design Using

**Geometric Programming** 

Art Group: TBA

Examiner: TBA

### INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In accordance with the duty of disclosure, enclosed is a copy of IDS Citation Form PTO/SB/08 or PTO-1449, together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed for applications filed after June 30, 2003). This IDS and IDS Citation Form are being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: July 23, 2004

Chui-Kiu Teresa Wong, Reg. No. 48,042

12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025 Telephone: (408) 720-8300

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Esther L. Campbell

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Date

JUL 2 7 2004

TRANSMITTAL FORM	Application No.	10/810,444
TRANSMITTAL FORM	Filing Date	March 26, 2004
(to be used for all correspondence after initial filing)	First Named Inventor	David M. Colleran
	Art Unit	ТВА
·	Examiner Name	TBA .
Total Number of Pages in This Submission 28	Attorney Docket Number	4363P005C

ENCLOSURES (check all that apply)								
Fee Transmittal	Form	Drawing(s)		After Allowance Communication to Group				
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I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.								
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FEE TRANSMITTAL	Application Number	10/810,444		
FEE TRANSMITTAL for FY 2004	Filing Date	March 26, 2004		
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Applicant claims small entity status. See 37 CFR 1.27.	Examiner Name	TBA		

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Name (Print/Type)	Chui-Kiu Teresa Wo	ong		egistratio Itomey/Ager		4	18,042	Telephone	(408) 720	)-8300
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Art Unit

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		,	U.S. PATEN	IT DOCUMENTS		
Examiner Initials*	Cite No.	Num	Document Number ber-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
DM		US-	6,311,145 B1	10/30/2001	Hershenson	
DM		US-	6,425,111 B1	7/23/2002	del Mar Hershenson	
DM		US-	6,577,992 B1	6/10/2003	Tchemiaev, et al.	
- DM		US-	6,532,569 B1	3/11/2003	Christen, et al.	
DM		US-	6,381,563 B1	4/30/2002	O'Riordan, et al.	
DM		US-	4,827,428	5/2/1989	Dunlop, et al.	
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Examiner	/David Mis/ (09/27/2006)	Date Considered	09/27/2006
Signature	/ David Mis/ (03/21/2000)	.	03/21/2000

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-788-9199) and select option 2.

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language translation is attached.

Substitute fo	or Form 1	1449/PTO		Comp	olete if Known	
INFO	RMA	TION DISC	CLOSURE	Application Number	10/810,444	
				Filing Date	March 26, 2004	
STA	STATEMENT BY APPLICANT			First Named Inventor:	Dave Colleran	
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				Examiner Name	ТВА	
Sheet		of	3	Attorney Docket Number	4363P005	
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Examiner Initials*	Cite No <sup>1</sup>		magazine, journal, s	TAL LETTERS), title of the article erial, symposium, catalog, etc.), dolisher, city and/or country where	late, page(s), volume-issue	7
DM			c Programs," pp., 1	easible Interior-Point Algorithm 155-181, Mathematical Program		
DM		GIELEN, G., et al., "An Analogue Module Generator For Mixed Analogue/Digital ASIC Design", International Journal of Circuit Theory and Applications, Vol. 23, pp. 269-283, 1995.				
DM .		HERSHENSON, M., et al., "Automated Design of Folded-Cascode Op-Amps with Sensitivity Analysis", pp. 121-124, Electonrics, Circuits and Systems, IEEE International Conference on LISBOA, September 7-10, 1998.				
DM		HERSHENSON, M., et al., "Optimization of Inductor Circuits via Geometric Programming", pp. 994-998, Design Automation Conference, June 21, 1999, Proceddings.				
DM		MEDIERO, F., et al., "A Vertically Integrated Tool For Automated Design Of Sigma Delta Modulators", IEEE Journal of Solid-State Circuits, Vol. 30., No. 7, July 1, 1995, pp. 762-767.				
DM		HERSHENSON, M., et al., "Optimal Design Of A CMOS Op-Amp Via Geometric Programming", IEEE Transactions On Computer Aided Design Of Integrated Circuits And Systems, Vol. 20., N. 1 January 2001, pp. 1-21.				
DM		MANDAL, P., et al., "CMOS Op-Amp Sizing Using A Geometry Programming Formulation", IEEE Transactions On Computer Aided Design Of Integrated Circuits And Systems, Vol. 20., No. 1, January 31, 2001, pp. 22-38.				
DM		DAEMS, W., et al., "Simulation-based Automatic Generation Of Signomial And Posynomial Performance Models For Analog Integrated Circuit Sizing", IEEE/ACM International Conference On Computer-Aided Design, November 4, 2001, pp. 70-74.				
DM		VON KAENEL Clock Generat	, V., et al., "A 320M ion", IEEE Solid-Sta ers, 42nd ISSCC96	Hz, 1.5mW at 1.36V CMOS P ate Circuits Conference, Febru // SESSION 8 / DIGITAL CLOC	LL For Microprocessor pary 9, 1996, Digest of	
DM		Microprocesso 1599-1607.	r", IEEE Journal of	erator with 5 to 110 MHz of Lo Solid-State Circuits, Vol. 27, N	No. 11, November 1992, pp.	
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<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1995, pps. 1259-1266.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Substitute fo	or Form 1	449/PTO				Comp	lete if Known	
INFO	RMAT	ΓΙΟN	DISC	LOSUF	?F	Application Number	10/119,347	
						Filing Date	April 7, 2002	
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		_	<del>,</del> -			Examiner Name	Mis, David C.	
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<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

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Mornev's Docket No. 004363.P005C

**PATENT** 

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

David M. Colleran

Application No.: 10/810,444

Filed:

March 26, 2004

For: Automatic Phase Lock Loop Design

**Using Geometric Programming** 

**Examiner: Not Yet Assigned** 

Art Unit: Not Yet Assigned

Mail Stop Amendment **Commissioner for Patents** P.O. Box 1450 Alexandria, Virginia 22313-1450

### INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed for applications filed after June 30, 2003). It is respectfully requested that the cited documents be considered and that the enclosed copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on (Date of Deposit) (Typed or printed name of person mailing correspondence) (Signature of person mailing correspondence)

Application No.: 10/810,444 - 1 -

Docket No.: 004363.P005C

Pursuant to 37 C.F.R. § 1.97, the submission of this Information

Disclosure Statement is not to be construed as a representation that a search

has been made and is not to be construed as an admission that the information

cited in this statement is material to patentability.

Pursuant to 37 C.F.R. § 1.97, this Information Disclosure Statement is being submitted under one of the following (as indicated by an "X" to the left of the appropriate paragraph):

X	37 C.F.R. §1.97(b).
	37 C.F.R. §1.97(c). If so, then enclosed with this Information Disclosure Statement is one of the following:
	A statement pursuant to 37 C.F.R. §1.97(e) or
	A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p).
	37 C.F.R. §1.97(d). If so, then enclosed with this Information Disclosure Statement are the following:
	(1) A statement pursuant to 37 C.F.R. §1.97(e); and

(2) A check for \$180.00 for the fee under 37 C.F.R. §1.17(p) for submission of the Information Disclosure Statement.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 9/2, 2004

Chui-Kiu Teresa Work

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Reg. No. 48,042

12400 Wilshire Blvd. Seventh Floor Los Angeles, CA 90025 (408) 720-8300

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Substitute	for Form 1449	//PTO		OIPE	Complete if	Known
	INFOR	ΑΜ	TION DISCLOSUR	AO & %	Application Number	10/810,444
			<i>1</i>	<i>[</i>	Filing Date	March 26, 2004
			ENT BY APPLICAN	T 53P 0 7 2004	First Named Inventor:	David M. Colleran
	,	(use as	s many sheets as necessary)		Art Unit	Not Yet Assigned
				The record	Examiner Name	Not Yet Assigned
Sheet	1		of	3	Attorney Docket Number	004363.P005C
			U.S. PATEN	IT DOCUMENTS		
Examiner Initials*	Cite No.		Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
		Num	ber-Kind Code <sup>2</sup> (If known)			Figures Appear
DM		US-	6,578,179 B2	06-10-2003	Shirotori, et al.	
DM		US-	6,574,786 B1	06-03-2003	Pohlenz, et al.	
DM		US-	6,539,533 B1	03-25-2003	Brown, III et al.	
DM		US-	6,581,188	06-17-2003	Hosomi, et al.	
DM		US-	6,311,315	10-30-2001	Tamaki	
DM		US-	6,002,860	12-14-1999	Voinigescu, et al.	
DM		US-	5,754,826	05-19-1998	Gamal, et al.	
DM		US	5,633,807	05-27-1997	Fishburn, et al.	
DM		US-	5,055,716	10-08-1991	El Gamel	
DM		US-	5,289,021	02-22-1994	El Gamel	
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Examiner	/ /	100 100 10000	Date Considered	09/27/2006
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### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/810,444	
Filing Date	March 26, 2004	
First Named Inventor:	David M. Colleran	
Art Unit	Not Yet Assigned	_
Examiner Name	Not Yet Assigned	
Attorney Docket Number	004363.P005C	

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
D <b>M</b>		HERSHENSON, M., et al., "GPCAD: A Tool for CMOS Op-Amp Synthesis" 8 pages, Proceedings of the IEEE/ACM International Conference on Computer Aided Design (ICCAD), pp. 296-303, November 1998.	
DM		HERSHENSON, M., et al., "Posynomial models for MOSFETs" 9 pages, July 7, 1998.	
DM		CHANG, H, et al., "A Top-Down, Constraint-Driven Design Methodology for Analog Integrated Circuits" 6 pages, IEEE 1992 Custom Integrated Circuits Conference.	
DM		CHAVEZ, J., et al, "Analog Design Optimization: A Case Study" 3 pages, IEEE, January 1993.	
DΜ		GEILEN, G., et al., "Analog Circuit Design Optimization Based on Symbolic Simulation and Simulated Annealing", pp. 707-713, IEEE Journal of Solid-State Circuits, Vol. 25, No. 3, June 1990.	
DM		FISHBURN, J, et al., "TILOS: A Posynomial Programming Approach to Transistor Sizing" pp. 326-328, IEEE, 1985.	
DM		MAULIK, P., et al., "Integer Programming Based on Topology Selection of Cell-Level Analog Circuits", 12 pages, IEEE Transactions On Computer-Aided Design Of Integrated Circuits And Systems, Vol. 14, No. 4, April 1995.	
DM		SWINGS, K., et al., "An Intelligent Analog IC Design System Based On Manipulation Of Design Equations" pp. 8.6.1-8.6.4, IEEE 1990, Custom Integrated Circuits Conference.	
DM		NESTEROV, Y., et al., "Interior-Point Polynomial algorithms in Convex Programming" 8 pgs., 1994, Society for Industrial and Applied mathematics.	
DM		YANG, H.Z., et al., "Simulated Annealing Algorithm with Multi-Molecule: an Approach to Analog Synthesis" pp. 571-575, IEEE, 1996.	
DM		WONG, D.F., et al., "Simulated Annealing For VLSI Design" 6 pages, 1998, Kulwer Academic Publishers.	

Examiner /David Mis/ (09/27/2006)	Date Considered	09/27/2006
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<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is In conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<sup>&#</sup>x27;Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

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## INFORMATION DISCUSSIFE STATEMENT BY APPLICANT

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Complete if Known				
Application Number	10/810,444			
Filing Date	March 26, 2004			
First Named Inventor:	David M. Colleran			
Art Unit	Not Yet Assigned			
Examiner Name	Not Yet Assigned			
Attorney Docket Number	004363.P005C			

Sneet	3	Attorney Docket Number 004363.P005C				
		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				
DM		MAULIK, P., et al., "Sizing of Cell-Level Analog Circuits Using Constrained Optimization Techniques" pp. 233-241, IEEE Journal of Solid-State Circuits, Vol. 28, No. 3, March 1993.				
DM		OCHOTTA, E, et al., "Synthesis of High –Performance Analog Circuits in ASTRX/OBLS" pp. 273-295, IEEE Transactions on Computer-Aided Design of Integrated Circuits And Systems, Vol. 15, No. 3, March 1996.				
DM		WRIGHT, S., "Primal-Dual Interior-Point Methods" pp. 1-3, <a href="http://www.siam.org/books/wright">http://www.siam.org/books/wright</a> , Printed August 19, 1998.				
DM		SHYU, J., et al., "Optimization-Based Transistor Sizing" pp. 400-408, IEEE Journal of Solid-State Circuits, Vol. 23, No. 2, April 1998.				
DM		WRIGHT, S., "Primal-Dual Interior-Point Methods" 14 pages, 1997, Society for Industrial and Applied Mathematics.				
DM		VAN LAARHOVEN, P.J.M., et al., "Simulated Annealing: Theory and Applications" 26 pages, 1987, Kulwer Academic Publishers.				
DM		HERSHENSON, M., et al., "CMOS Operational Amplifier Design and Optimization via Geometric Programming" pp. 1-4, Analog Integrated Circuits, Stanford University.				
DM		AGUIRRE, M.A., et al., "Analog Design Optimization by means of a Tabu Search Approach" pp. 375-378.				
DM		MEDEIRO, F., et al., "A Statistical Optimization-Based Approach for Automated Sizing of Analog Cells", pp. 594-597, Dept. of Analog Circuit Design.				
DM		SPATNEKAR, S., "Wire Sizing as a Convex Optimization Problem: Exploring the Area- Delay Tradeoff" 27 pages, Dept. of Electrical and Computer Engineering.				
DM		SU, H., et al., "Statistical Constrained Optimization of Analog MOS Circuits Using Empirical Performance Models" pp. 133-136.				
DM		VASSILIOU, I., et al, "A Video Driver System Designed Using a Top-Down, Constraint- Driven Methodology" 6 pages.				
DM	·	SAPATNEKAR, S, et al., "An Exact Solution to the Transistor Sizing Problem for CMOS Circuits Using Convex Optimization" 35 pages.				

Examiner	/David Mis/ (09/27/2006)	Date	20/27/2026
Signature	/David MIS/ (03/21/2000)	Considered	09/27/2006

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TRANSMITTAL FORM		Filing Date	March 26, 2004						
(to be used for all correspondence after initial filing)		First Named Inventor	David M. Colleran						
		Art Unit	2123						
· ,		Examiner Name	Unassigned						
Total Number of Pages in This Submission	on 7 .	Attorney Docket Number	4363P005C						
ENCLOS	SURES (chec	k all that apply)							
Fee Transmittal Form	Drawing(s)		After Allowance Communication to TC						
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or Individual name BLAKELY, So	OKOLOFF. T	AYLOR & ZAFMA	AN LLP						
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Based on PTC/SB/21 (09-04) as modified by Staken Sciology Taylor & Zalman (with 1/30/2005. SEND TO: Commissioner for Patents, P.O. Box-1460, Alexandria, VA 22313-2566

## E TRANSMITTAL for FY 2005 Patent loss are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27.

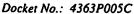
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	Complete if Known	
Application Number	10/810,444	
Filing Date	March 26, 2004	
First Named Inventor	David M. Colleran	
Examiner Name	Unassigned	
Art Unit	2123	
Attorney Docket No.	4363P005C	

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METHOD OF PAYMENT (check all that apply)	
☐ Check ☐ Credit card ☐ Money Order ☒ None ☐ Other (plea	ase identify):
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ı	1121110 (110017)00)	Robert B. O'Ro	ourke	(Attorney/Agent)	46,972	Telephone	(408) 720-8300
Į	Signature		~			<u> </u>	1 / /
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DAVID M. COLLERAN, ET AL.

Application No.: 10/810,444

the Application of:

Filed: March 26, 2004

or: Automatic Phase Lock Loop Design Using

**Geometric Programming** 

Art Group: 2123

Examiner: Unassigned

### INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In accordance with the duty of disclosure, enclosed is a copy of IDS Citation Form PTO/SB/08 or PTO-1449, together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed). This IDS and IDS Citation Form are being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Date: 2/27/06

Respectfully submitted,

BLAKELY SOKOLOFF, TAYLOR & ZAFMAN LLP

Robert B. O'Rourke, Reg. No. 46,972

12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025 Telephone: (408) 720-8300

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Carla Vignola

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	·	1		NON PAT	ENT LIT	ERATURE DOCUMENTS			
Examiner Initials*	Initials* No item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published							T²	
DM		Internat	BOWMAN, R., "An Imaging Model For Analog Macrocell Layout Generation", IEEE International Symposium On Circuits And Systems, Vol. 2, 8 May 1989, pp. 1127-1130, XP010085007.						
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Examiner Signature	/Dav	vid Mis	s/ (09,	/27/2006)	)	,	Date	09/27/200	6

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Considered

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Signature

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IDS - 09/18/2006

TRANSMITTAL FORM			Application No.	10/810,	,444		
			Filing Date	March	26, 2004		
(to be used for all cor	respondence afte	er initial filing)	First Named Inventor	David I	M. Colleran		
			Art Unit	2123			
			Examiner Name	Unassi	gned		
Total Number of Pag	es in This Submissi	on 7	Attorney Docket Number	4363P0	005C		
	ENCLOSURES (check all that apply)						
Fee Transmittal For	m .	Drawing(s)		☐ Aff	ter Allowance Communication TC		
Fee Attached	į	Licensing-r	elated Papers	☐ åf	opeal Communication to Board Appeals and Interferences		
Amendment / Resp	onse	Petition			peat Communication to TC peat Notice, Brief, Reply Brief)		
After Final Affidavits/dec	claration(s)	Petition to O Provisional	Convert a Application	Pr	roprietary Information		
Extension of Time F	Request	Power of Attorney, Revocation Change of Correspondence Address		☐ St	atus Letter		
Express Abandonm	ent Request	Terminal Disclaimer			her Enclosure(s) lease identify below):		
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	SIGNATURE	OF APPLICAN	IT, ATTORNEY, OR A	GENT			
	Robert B. O'Ro	arke, Reg. No.	46,972				
or Individual name	OKOLOFF, 1	TAYLOR & ZAFN	IAN LL	.P			
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I hereby certify that this co sufficient postage as first 1450, Alexandria, VA 223	class mail in an env	eing deposited with relope addressed	h the United States Posta to: Mail Stop Amendment	Service or Commissi	n the date shown below with oner for Patents, P.O. Box		
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Signature Quee A			unn	Date	9-12-2006		

Based on PTO/SB/21 (09-04) as modified by Bakely, Solokoff, Teytor & Zefman (wtr) 11/30/2005. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

# TRANSMITTAL for FY 2005 Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known					
Application Number	10/810,444				
Filing Date	March 26, 2004				
First Named Inventor	David M. Colleran				
Examiner Name	Unassigned				
Art Unit	2123				
Attorney Docket No.	4363P005C				

				METHOD OF PAYMENT (check all that apply)					
Check [	Credit ca	ard M	Ioney Or	rder None Other (please identify):					
Deposit /	Account D	eposit Ac	count N	lumber: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Za	afman LLP				
□ Chá <b>⊠</b> Chá	For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)  Charge fee(s) indicated below  Charge any additional fee(s) or underpayment of fee(s)  Under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.								
FEE CALCU	LATION								
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1051	130	2051	65	Surcharge - late filing fee or oath					
1052	50	2052		Surcharge - late provisional filing fee or cover sheet.					
2053	130	2053		Non-English specification	Non-English specification				
1251	120	2251		Extension for reply within first month					
1252	450	2252		Extension for reply within second month					
1253	1,020	2253		xtension for reply within third month					
1254	1,590	2254		extension for reply within fourth month					
1255	2,160	2255		xtension for reply within fifth month					
1401	500	2401		Notice of Appeal					
1402	500	2402		Filing a brief in support of an appeal					
1403	1,000	2403		Request for oral hearing					
1451	1,510	2451		Petition to institute a public use proceeding					
1460	130	2460		Petitions to the Commissioner					
1807	50	1807		Processing fee under 37 CFR 1.17(q)					
1806	180	1806		Submission of Information Disclosure Stmt	`"				
1809	790	1809	395	illing a submission after final rejection (37 CFR § 1.129(a))					
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Other fo	e (spe	cify) S		sion of IDS prior to first Office Action	0.00				
				SUBTOTAL (2) (\$)					

SUBMITTED B	Y				Comp	elete (if applicable)
Name (Print/Type)	Robert B. O	'Rourke	Registration No. (Attorney/Agent)	46,972	Telephone	(408) 720-8300
Signature	7				Date	9/2/16

Docket No.: 4363P005C

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

the Application of:

DAVID M. COLLERAN, ET AL.

Application No.: 10/810,444

Filed: March 26, 2004

SEP 1 8 2006

For: Automatic Phase Lock Loop Design Using

Geometric Programming

Art Group: 2123

Examiner: Unassigned

### INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In accordance with the duty of disclosure, enclosed is a copy of IDS Citation Form PTO/SB/08 or PTO-1449, together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed). This IDS and IDS Citation Form are being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Date: 9/12/06

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Robert B. O'Rourke, Reg. No. 46,972

12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025 Telephone: (408) 720-8300

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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Sheet 1 of

Complete if Known					
Application Number	10/810,444				
Filing Date	March 26, 2004				
First Named Inventor	David M. Colleran				
Art Unit	2123				
Examiner Name	Unassigned				
Attorney Docket Number	4363P005C				

	U.S. PATENT DOCUMENTS							
Examiner Cite Initials* No.1		Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where			
		Number - Kind Code <sup>1</sup> (if known)	or Issue Date MM-OD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear			
DM		US-2004/0172609 A1	09-02-2004	Hassibi, et al.				
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FOREIGN PATENT DOCUMENTS								
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	Cite No.¹	UIB	Publication Date	No.1 Publication Date Name of Patentee or	No. Country Code <sup>2</sup> , Number   Kind Code <sup>3</sup> (Kingger)   Publication Date   Name of Patentee or   Where Relevant Passages			

Examiner	1		Date	
Signature	/ David Mis/	(09/27/2006)	Considered	09/27/2006
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<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

<sup>&#</sup>x27;Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. \*Applicant is to place a check mark here if English language Translation is attached.